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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/377,447	08/19/1999	JEFFREY P. BEZOS	AMAZON.012A1	7836

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EXAMINER

ZURITA, JAMES H

ART UNIT	PAPER NUMBER
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2165:

DATE MAILED: 02/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/377,447

Applicant(s)

BEZOS ET AL.

Examiner

James Zurita

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on application filed 19 August 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities:

On page 20, lines 25-28, applicants describe step **126**. On line 30, applicants state "this step **124** may be omitted." It is not clear whether applicants intend that step **124** or step **126** should be omitted, as applied to Fig. 7A.

It is not clear if page 22, line 9, "For each base community . . ." should be changed to "In step **152**, for each base community . . ." since step 152 is not otherwise mentioned, although step **152** is presented in Fig. 8.

For purposes of this examination, Examiner will apply interpretations as noted above. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily

published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Linden et al. (U.S. Patent 6,266,649).

As per claims 1 and 12, Linden et al. disclose the method and system of assisting users in selecting items from an electronic catalog of items, the catalog accessible to users of an online store that provides services for allowing users to purchase items from the catalog, the method comprising:

- providing a database which contains information about a plurality of user communities, wherein different communities represent different subsets of users of the store (Col. 1, lines 11-14; Col. 1, lines 56-67; Col. 2, lines 1-11; Col. 7, lines 20-39; Col. 12, lines 15-25; communities: Col. 1, lines 5-9; Col. 1, lines 42-45; Col. 2, lines 22-26; Col. 2, lines 35-37; Col. 3, lines 15-18; Col. 5, lines 56-67; Col. 8, line 64 – Col. 9, line 15);
- tracking online purchases of items from the store by the users to generate purchase history data, and storing the purchase history data in a computer memory (Col. 2, lines 22-29; Col. 3, lines 15-29; Col. 3, line 47-Col. 4, line 7; Col. 4, line 42-Col. 5, line 5; Col. 6, lines 60-67; Col. 14, lines 43-56; Col. 16, lines 6-36; Col. 16, lines 49-58);
- processing at least the purchase history data to identify at least one item which, based on pre-specified criteria, has become popular within a particular community (Col. 1, lines 5-9; Col. 2, line 57-Col. 3, line 6; Col. 3, lines 56-60; Col.

7, lines 20-25; Col. 9, lines 16-26; Col. 10, lines 37-45; Col. 10, lines 56-69; Col. 12, lines 4-67; Col. 14, lines 27-34; Col. 15, lines 63-67); and

- electronically notifying members of the community that the at least one item is popular within the community (Col. 1, lines 1-10; Col. 1, line 41-56; Col. 2, lines 33-56).

As per claim 2, Linden et al. the method of Claim 1, wherein electronically notifying members of the community comprises generating a Web page which includes a community-based most popular items list (Col. 1, lines 27-32; Col. 10, lines 28-36; Col. 11, lines 47-56; Col. 15, line 42-Col. 16, line 23).

As per claim 3, Linden et al. disclose the method of Claim 2, wherein the most popular items list is a bestsellers list (Col. 3, lines 7-37; Col. 6, lines 14-24; Col. 8, lines 1-49; Col. 9, lines 16-52; Col. 12, lines 38-44; Col. 14, lines 43-57; Col. 15, lines 26-67; all describe popular item lists, weighed and sorted accordingly – the lists may be referred to as a hot seller list, bestseller list, recommended list; most highly recommended list, etc.)

As per claim 4, Linden et al. disclose the method of Claim 1, wherein electronically notifying members of the community comprises automatically generating and sending an email message to members of the community (Col. 2, lines 46-56; Col. 10, lines 28-37; Col. 11, lines 47-56).

As per claim 5, Linden et al. disclose the method of Claim 4, wherein the email message contains contact information of at least one member of the community that has purchased an item described in the email message (Col. 2, lines 46-56; Col. 10,

lines 28-37; Col. 11, lines 47-56. As is well known in the art, an email may contain text, may contain hyperlinks, and may contain entire HTML web pages, with embedded hyperlinks. Hyperlinks identified by the HREF tag may be Universal Resource Locators as well as email addresses. The email address may be one of those selected from the database and as specified by various criteria).

As per claims 6, 7, 8, 9, 10, 11, 16, 17 and 18, Linden et al. disclose the method and system of claims 1 and 12, respectively, wherein processing the purchase history data to identify at least one item comprises identifying a set of characterizing purchases for the community, wherein the community is an implicit membership community and the community may be based on email addresses of users, or derived from an electronic address book of a user, or where the community is a composite community which comprises multiple other communities of the database (Col. 2, lines 46-56; Col. 5, lines 31-47; Col. 5, lines 34-41; Col. 10, lines 37-46. Explicit – users actively join. Implicit – computer identified from information known about the user (stored in a database) – e.g., Microsoft.com users, geographic region base. Both implicit and explicit communities can be determined from email and shipping addresses – see application, page 7, lines 6-9).

As per claim 13, Linden et al. disclose the method of Claim 12, wherein the process comprises a first process which generates a data store which contains bestselling items lists for at least some of the communities (Col. 3, lines 7-37; Col. 6, lines 14-24; Col. 8, lines 1-49; Col. 9, lines 16-52; Col. 12, lines 38-44; Col. 14, lines 43-57; Col. 15, lines 26-67; all describe popular items, weighed and sorted accordingly –

the lists may be referred to as a hotseller list, bestseller list, recommended list; most highly recommended list, etc.), and

a second process which selects items from the table to display to users (Col. 3, lines 40-50; Col. 6, lines 60-67; Col. 10, lines 13-37; Col. 16, lines 5-48).

As per claims 14 and 15, Linden et al. disclose the system of Claim 12, further comprising a user interface which allows users to select and join at least some of the user communities (Col. 1, lines 35-30; Col. 2, lines 46-56; Col. 5, lines 31-47; Fig. 1 and related text, Col. 7, line 5 - Col. 10, line 3; Fig. 6 and related text, Col. 15, line 53-Col. 16, line 22; All describe web user interfaces. Fig. 6 shows item 202, which displays category-specific recommendations, and item 200, which allows users to view other items. These items are based on selected criteria. Selected criteria may include user email domain, geographical location, company domain, or other data stored in user profile and purchase databases. User profile fields may be saved as a user navigates through the web site. The cookie on the user's machine allows the server site to track selected items, including items purchased, items viewed and not purchased, length of time on specific web pages, user's email address. Users can also be tracked using collaborative filtering techniques based on the interest of a community of users, as per Col. 1, line 42-Col. 2, line 29. These communities may be divided and subdivided according to specified research and marketing requirements. Displays on the web may include any and all items found in any of the databases in the system. The items thus displayed may include descriptions of items, as per claim 21).

As per claims 19, 20 and 24, Linden et al. disclose the system of Claim 12, wherein the process generates and displays community bestsellers lists for at least some of the communities (Col. 3, lines 7-37; Col. 6, lines 14-24; Col. 8, lines 1-49; Col. 9, lines 16-52; Col. 12, lines 38-44; Col. 14, lines 43-57; Col. 15, lines 26-67; all describe popular items, weighed and sorted accordingly – the lists may be referred to as a hot seller list, bestseller list, recommended list; most highly recommended list, etc. The list may be displayed on a web page, and the list may also include items that are popular among non-members of particular communities).

As per claims 21, 22 and 23, Linden et al. disclose the system of Claim 12, wherein the process sends to the users notification emails that include descriptions of the items that are popular within particular communities, contact information of users that have purchased items described therein, and may specify a level of acceptance an item has attained within a particular community (Col. 1, lines 1-10; Col. 1, lines 41-56; Col. 2, lines 33-56. Once items are selected by community criteria, as in claims 19 and 20, the system may broadcast the information to either an entire email list, or to subsets of the email list. The email distribution/notification/broadcast list may be created by selection from user profiles. Alternatively, the system may create a temporary file of email addresses and may pipe these files as input to UNIX/LINUX/ sendmail programs or their MICROSOFT CORPORATION equivalents).

As per claim 25, Linden et al. disclose the system of Claim 24, wherein the process uses a censored chi-square algorithm to identify the set of items (Col. 1, lines 23-27; Col. 1, lines 44-46; Col. 2, lines 14-21; Col. 3, lines 24-28; Col. 3, lines 35-37;



Col. 6, lines 1-5; Col. 13, lines 50-53; Col. 14, lines 4-9. Other statistical analysis methods analyze discrete and continuous probability distributions. Discrete distributions include the geometric, the hypergeometric, and the negative binomial; Continuous distributions include the uniform, exponential, gamma, chi-square, beta, t, and F).

As per claim 26, Linden et al. disclose the method of assisting users in selecting items from an electronic catalog of items, the catalog accessible to users of an online store that provides services for allowing users to purchase items from the catalog, the method comprising the computer-implemented steps of:

- identifying a subset of users of the store that have email addresses that satisfy a particular criteria (Col. 1, lines 11-14; Col. 1, lines 56-67; Col. 2, lines 1-11; Col. 7, lines 20-39; Col. 12, lines 15-25; communities: Col. 1, lines 5-9; Col. 1, lines 42-45; Col. 2, lines 22-37; Col. 3, lines 15-18; Col. 5, lines 56-67; Col. 8, line 64 – Col. 9, line 15; user profiles and other database tables contain information about the users, including email addresses. These various tables can be searched to sort users by email address and email addresses can then be selected according to specified criteria);
- identifying at least one item that is popular among the subset of users, wherein the step of identifying comprises processing purchase history data of at least the subset of users (Col. 2, lines 22-29; Col. 3, lines 15-29; Col. 3, line 47-Col. 4, line 7; Col. 4, line 42-Col. 5, line 5; Col. 6, lines 60-67; Col. 14, lines 43-56; Col. 16, lines 6-58. Product databases, purchase histories, ratings, etc. as found in

- database 38, may be grouped for specified subsets of users, and then items purchased may be ranked by popularity within the specified subset of users); and
- electronically notifying users of the store of a popularity of the at least one item among the subset of users community (Col. 1, lines 1-10; Col. 1, line 41-56; Col. 2, lines 33-56. Once items are ranked, as above, the system may broadcast the information to either the entire email list, or to subsets of the email list. The email distribution/notification/broadcast list may be created by selection from user profiles. Alternatively, the system may create a temporary file of email addresses and may pipe these files as input to UNIX/LINUX/sendmail programs or their MICROSOFT CORPORATION equivalents).

As per claims 27, 28 and 29 Linden et al. disclose the methods of Claim 26, wherein identifying a subset of users comprises identifying all users of a selected email domain users, or wherein the selected email domain is an email domain of a selected company, or wherein identifying a subset of users comprises identifying all users of a selected group of email domains (Col. 1, lines 11-14; Col. 1, lines 56-67; Col. 2, lines 1-11; Col. 7, lines 20-39; Col. 12, lines 15-25; communities: Col. 1, lines 5-9; Col. 1, lines 42-45; Col. 2, lines 22-37; Col. 3, lines 15-18; Col. 5, lines 56-67; Col. 8, line 64 – Col. 9, line 15; user profiles and other database tables contain information about the users, including email addresses. These various tables can be searched and sorted by users' email address. Subsets of users may then be selected according to selected, specified criteria, including email domain names, email company names and selected group of email domains).

As per claim 30, Linden et al. disclose the method of Claim 26, wherein electronically notifying comprises generating a Web page which includes a list of bestselling items among the subset of users (Col. 1, lines 27-32; Col. 10, lines 28-36; Col. 11, lines 47-56; Col. 15, line 42-Col. 16, line 23).

As per claim 31, Linden et al. disclose the method of Claim 26, wherein electronically notifying comprises sending email notification messages to at least some of the users of the subset (Col. 1, lines 1-10; Col. 1, line 41-56; Col. 2, lines 33-56. Once items are ranked, as above, the system may broadcast the information to either the entire email list, or to subsets of the email list. The email distribution/ notification/ broadcast list may be created by selection from user profiles. Alternatively, the system may create a temporary file of email addresses and may pipe these files as input to UNIX/LINUX/sendmail programs or their MICROSOFT CORPORATION equivalents to notify selected sets and subsets of users).

As per claim 32, Linden et al. disclose the method of recommending items from a catalog of items, comprising:

- identifying a community of users that represents a subset of a general population of users (Col. 1, lines 11-14; Col. 1, lines 56-67; Col. 2, lines 1-11; Col. 7, lines 20-39; Col. 12, lines 15-25; communities: Col. 1, lines 5-9; Col. 1, lines 42-45; Col. 2, lines 22-37; Col. 3, lines 15-18; Col. 5, lines 56-67; Col. 8, line 64 – Col. 9, line 15; user profiles and other database tables contain information about the users, including email addresses. These various tables can be searched to sort users by email address and email addresses can then be selected according to

specified criteria. The system may thus identify a community of users that represents a subset of a general population of users).

- tracking at least one type of user activity that indicates user affinities for particular items of the catalog to generate history data (Col. 2, lines 22-29; Col. 3, lines 15-29; Col. 3, line 47-Col. 4, line 7; Col. 4, line 42-Col. 5, line 5; Col. 6, lines 60-67; Col. 14, lines 43-56; Col. 16, lines 6-36; Col. 16, lines 49-58);
- processing the history data of the general population of users, including the community of users, to identifying a set of items that distinguish the community from the general population (Col. 2, lines 22-29; Col. 3, lines 15-29; Col. 3, line 47-Col. 4, line 7; Col. 4, line 42-Col. 5, line 5; Col. 6, lines 60-67; Col. 14, lines 43-56; Col. 16, lines 6-58. Product databases, purchase histories, ratings, etc. as found in database 38, may be grouped for specified community of users. Items purchased by the specified community may be ranked by popularity within the specified subset of users. These rankings may be compared with items from the general population to obtain distinguishing characteristics between selected communities and general populations); and
- recommending items from the set of items to members of the community list (Col. 3, lines 7-37; Col. 6, lines 14-24; Col. 8, lines 1-49; Col. 9, lines 16-52; Col. 12, lines 38-44; Col. 14, lines 43-57; Col. 15, lines 26-67; all describe popular items, weighed and sorted accordingly – the lists may be referred to as suggested readings list, most highly recommended list, recommended list, hot seller list, bestseller list).

As per claim 33, Linden et al. disclose the method of Claim 32, wherein processing the history data comprises processing purchase history data, and the set of items consists essentially of items purchased by members of the community (Col. 1, lines 5-9; Col. 2, line 57-Col. 3, line 6; Col. 3, lines 56-60; Col. 7, lines 20-25; Col. 9, lines 16-26; Col. 10, lines 37-69; Col. 12, lines 4-67; Col. 14, lines 27-34; Col. 15, lines 63-67. Data from purchase histories tables, user profiles, and community links found in user profiles, a computer may process the information needed to present a list of a set of items that are purchased by specified criteria. Such criteria may include user community/group sets and subsets. Other criteria may include date ranges for historical analysis, geographic location, including country, province or state, city, district, etc.).

As per claim 34, Linden et al. disclose the method of Claim 32 wherein tracking at least one type of user activity comprises tracking item viewing events (Col. 1, lines 23-32; Col. 5, lines 31-47; Col. 7, lines 55-61; Col. 9, lines 6-15; Col. 10, lines 56-63; Col. 16, lines 6-32).

As per claim 35, Linden et al. disclose the method of Claim 32, wherein processing the purchase history data comprises applying a censored chi-square algorithm to the history data (Col. 1, lines 23-27; Col. 1, lines 44-46; Col. 2, lines 14-21; Col. 3, lines 24-28; Col. 3, lines 35-37; Col. 6, lines 1-5; Col. 13, lines 50-53; Col. 14, lines 4-9. Other statistical analysis methods analyze discrete and continuous probability distributions. Discrete distributions include the geometric, the hypergeometric, and the negative binomial; Continuous distributions include the uniform, exponential, gamma, chi-square, beta, t, and F).

As per claim 36, Linden et al. disclose the method of Claim 32, wherein the community is an implicit membership community (Col. 2, lines 50-56; Col. 5, lines 42-47; Col. 6, lines 34-41; Col. 10, lines 38-45; implicit and explicit grouping may also be obtained from email addresses found in user profiles. Explicit – users actively join. Implicit – computer identified from information known about the user (stored in DB) – e.g., Microsoft.com users, geographic region base. Both implicit and explicit communities can be determined from email and shipping addresses – see application, page 7, lines 6-9).


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Zurita whose telephone number is 703-605-4966. The examiner can normally be reached on 8:30 am to 5:00 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 703-308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-395-3900.

*jt*  
**James Zurita**  
**Patent Examiner**  
**Group Art Unit 2165**  
January 30, 2002

  
**WYNN COGGINS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**